

FIG. 1B

FIG. 1C

TOP VIEW

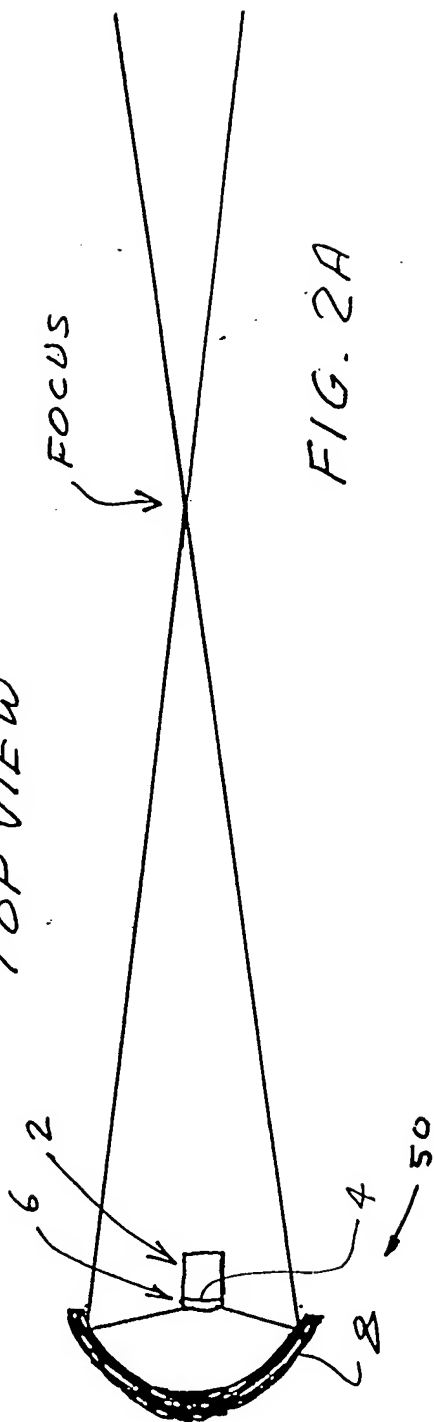
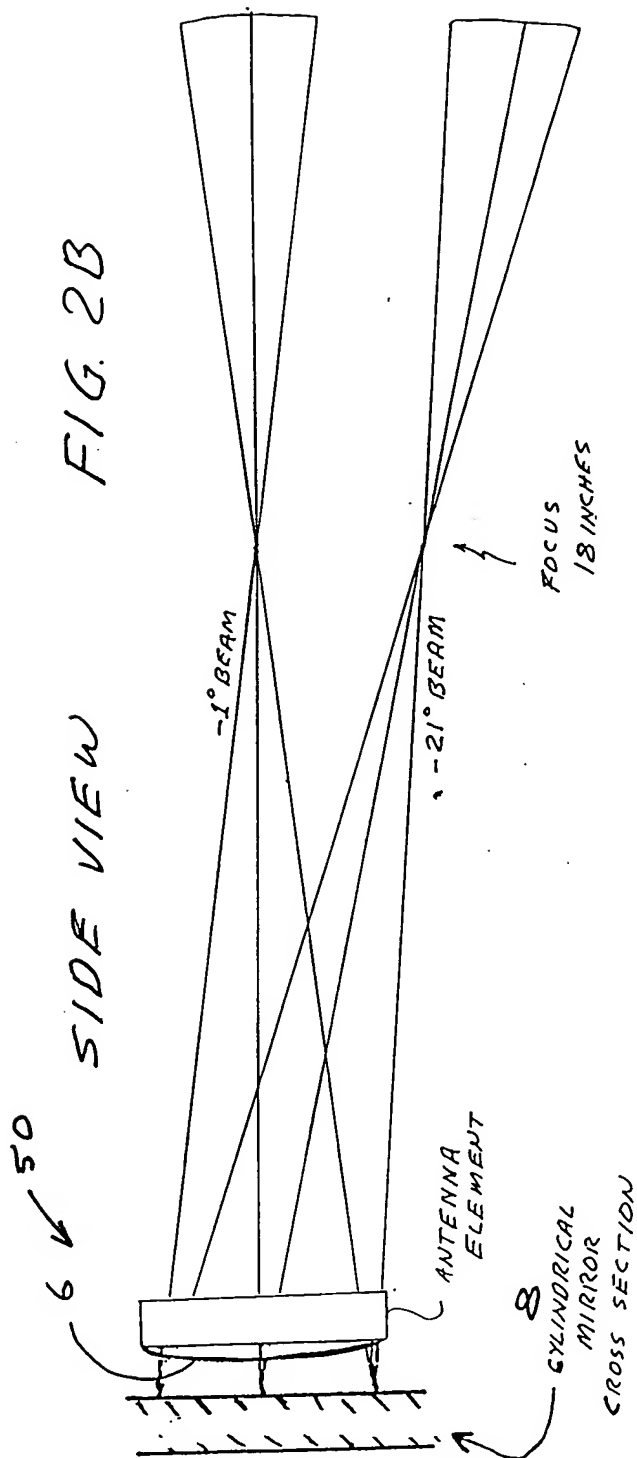


FIG. 2A

FIG. 2B

SIDE VIEW



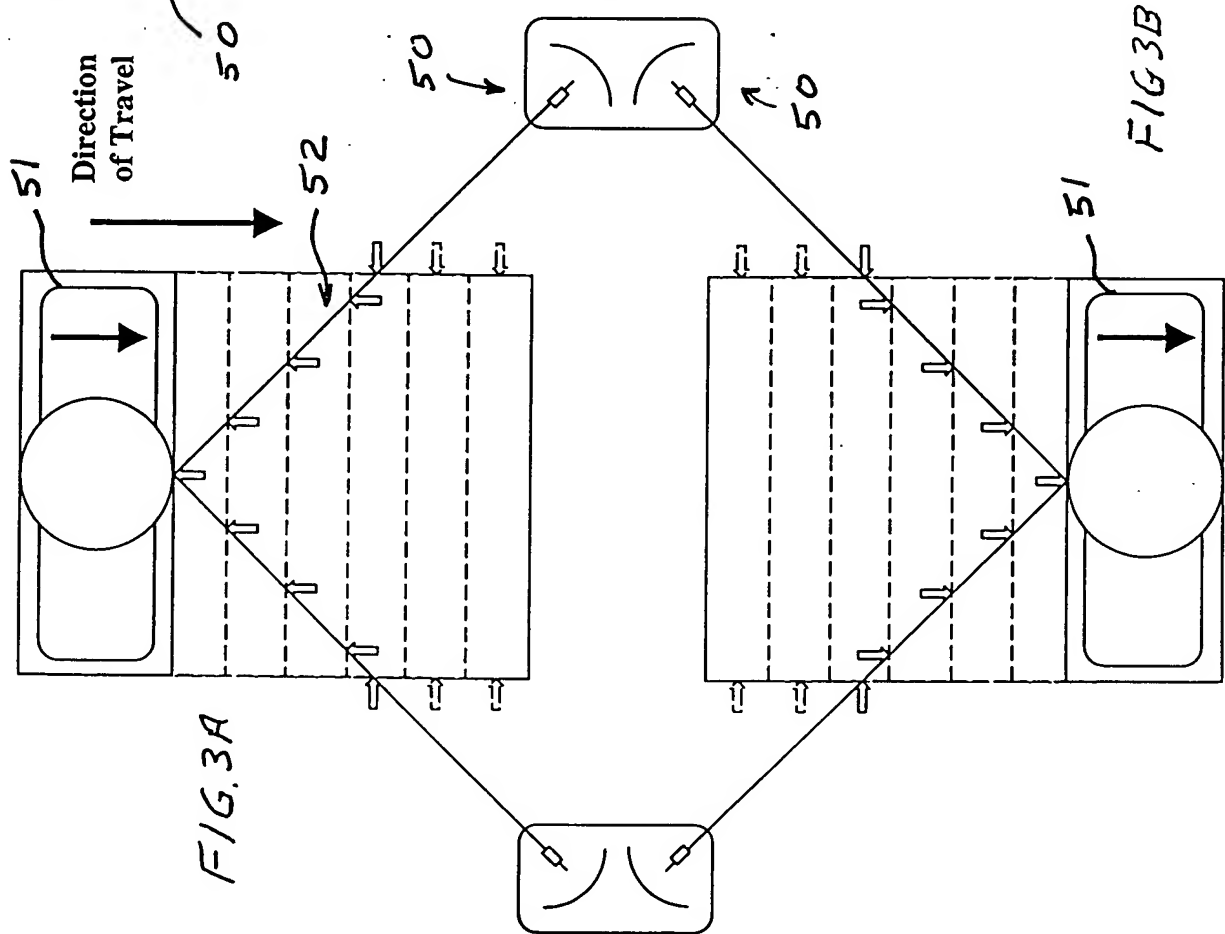
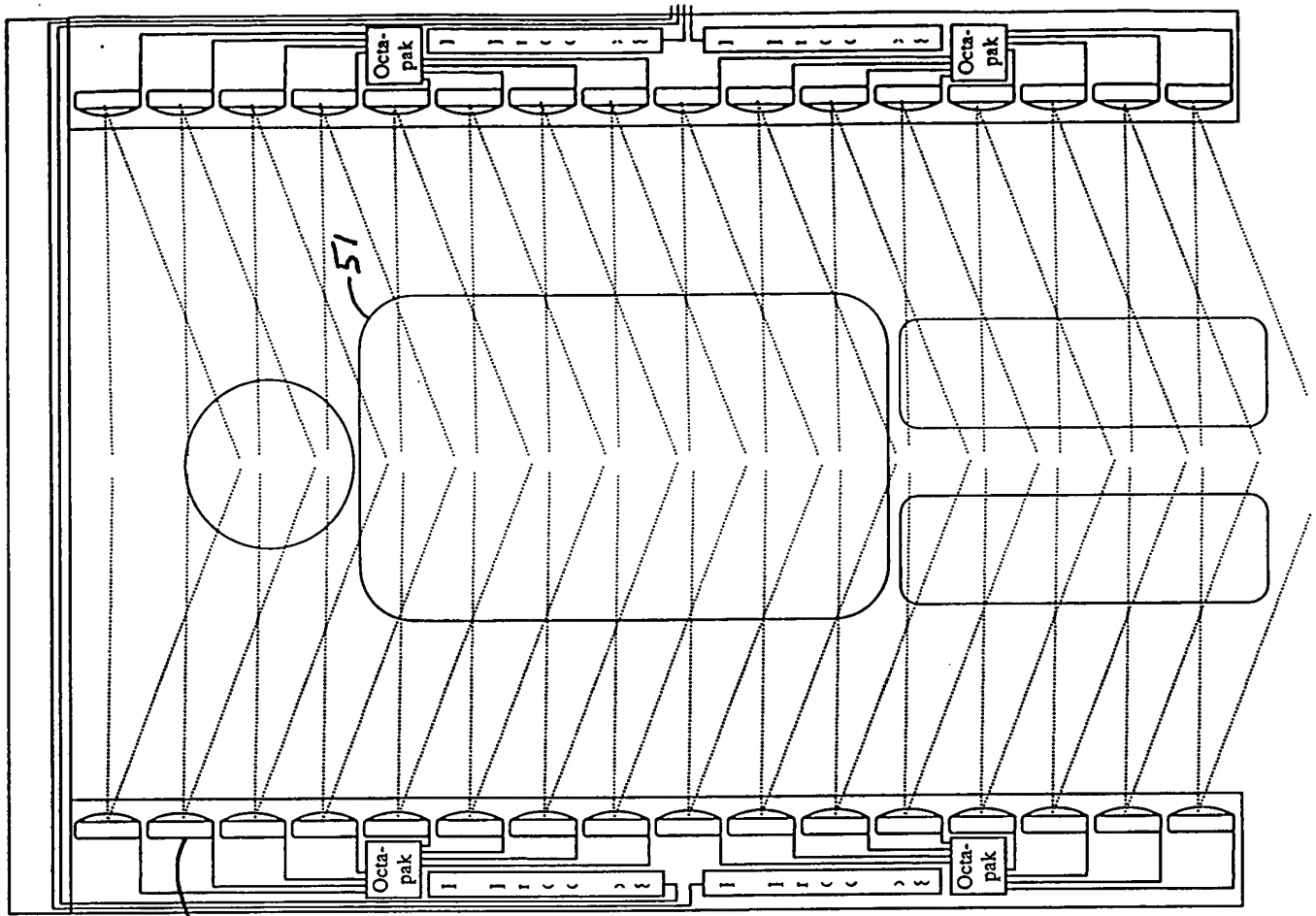
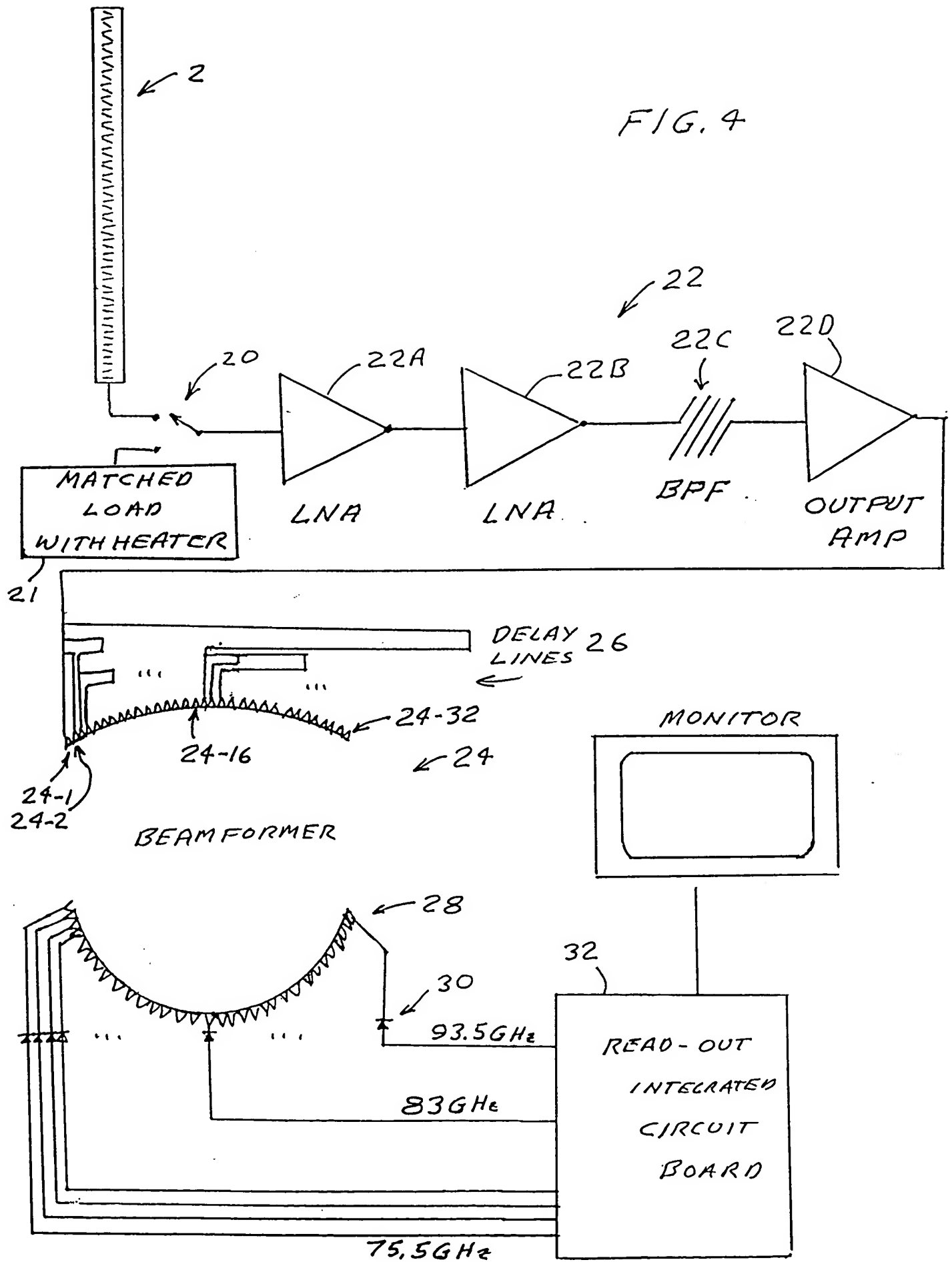


FIG. 4



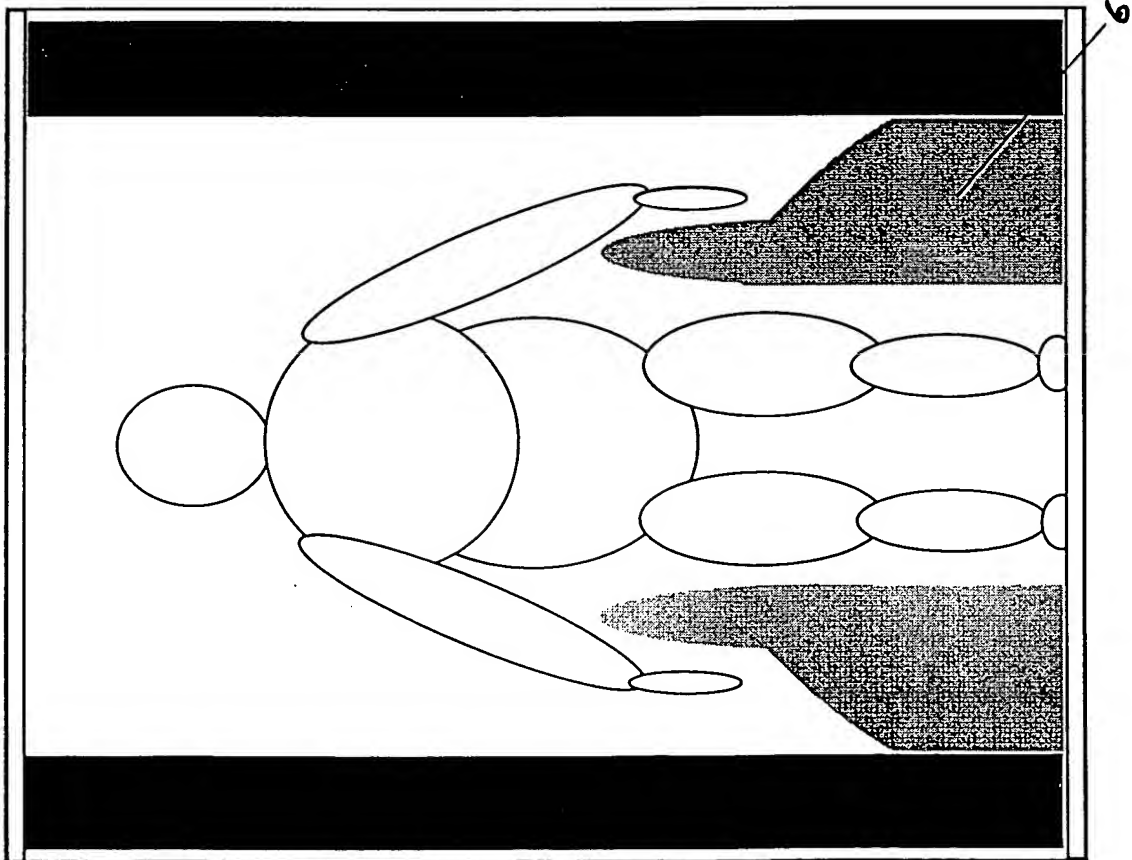


FIG. 5

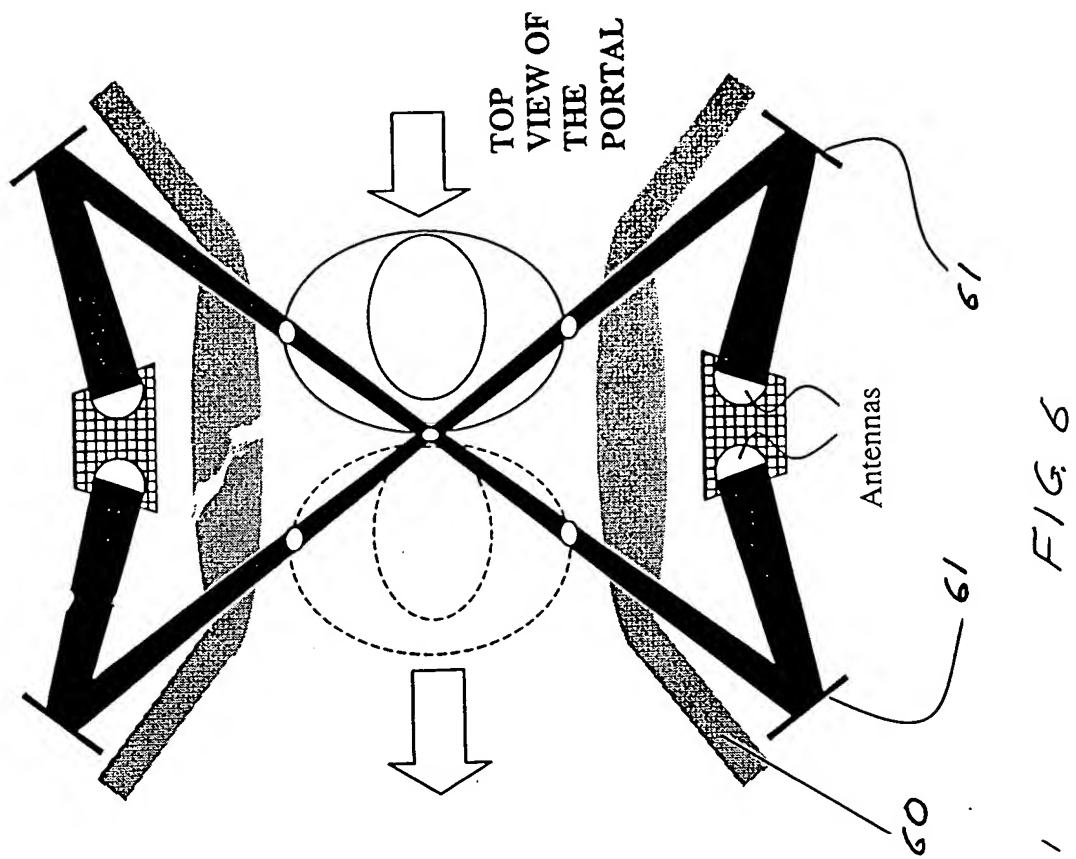


FIG. 6

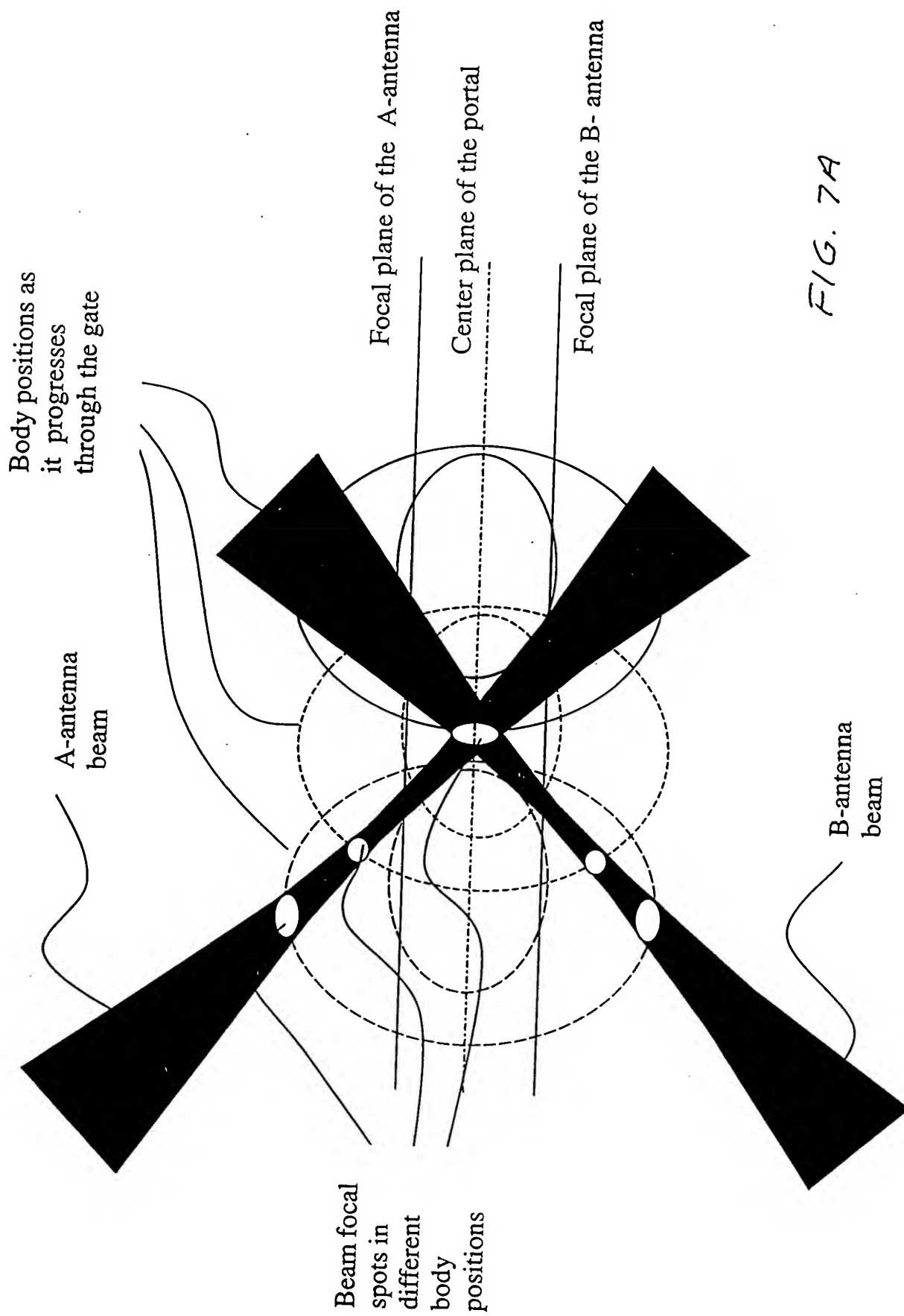


FIG. 7A

**Modeling transverse resolution of an elliptical cylinder antenna at 85 GHz.**

Transverse resolution defined as spot diameter in a section perpendicular to the beam axis at 50% of peak response.

Antenna diameter: 4.8 inches

Antenna height: 4.8 inches

Distance to the first focus: 4 inches

Distance to the second focus: 18 inches

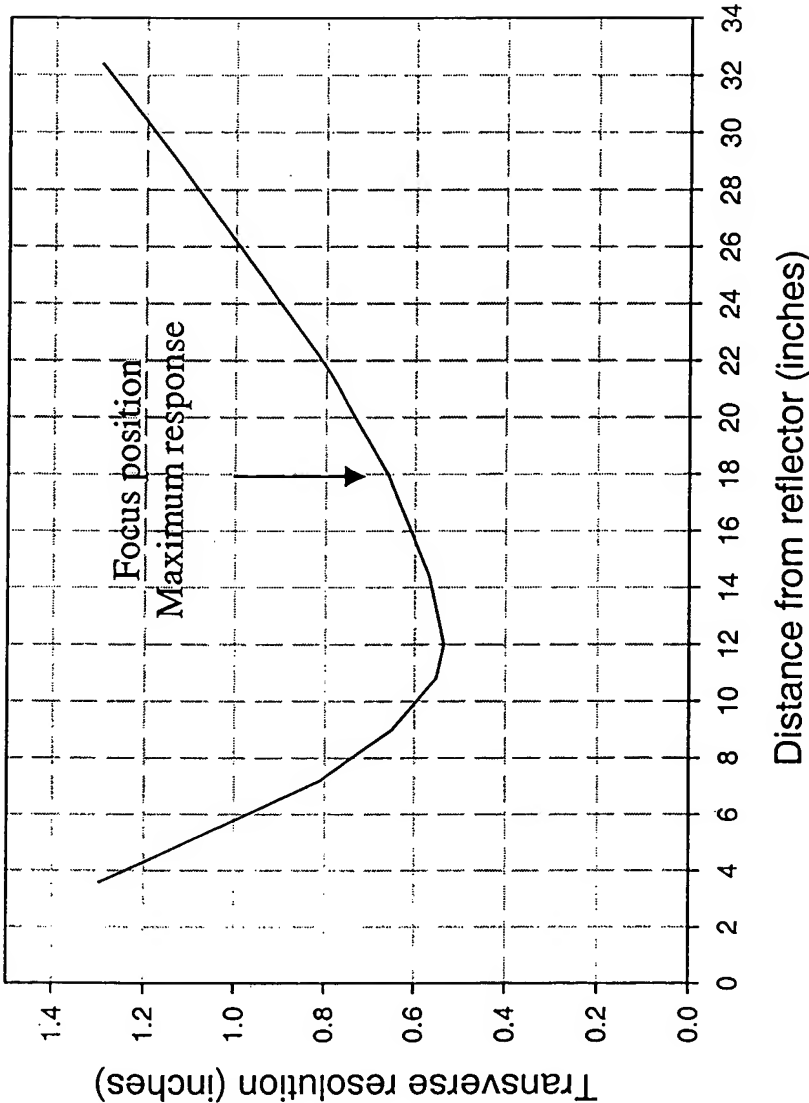


FIG. 7B

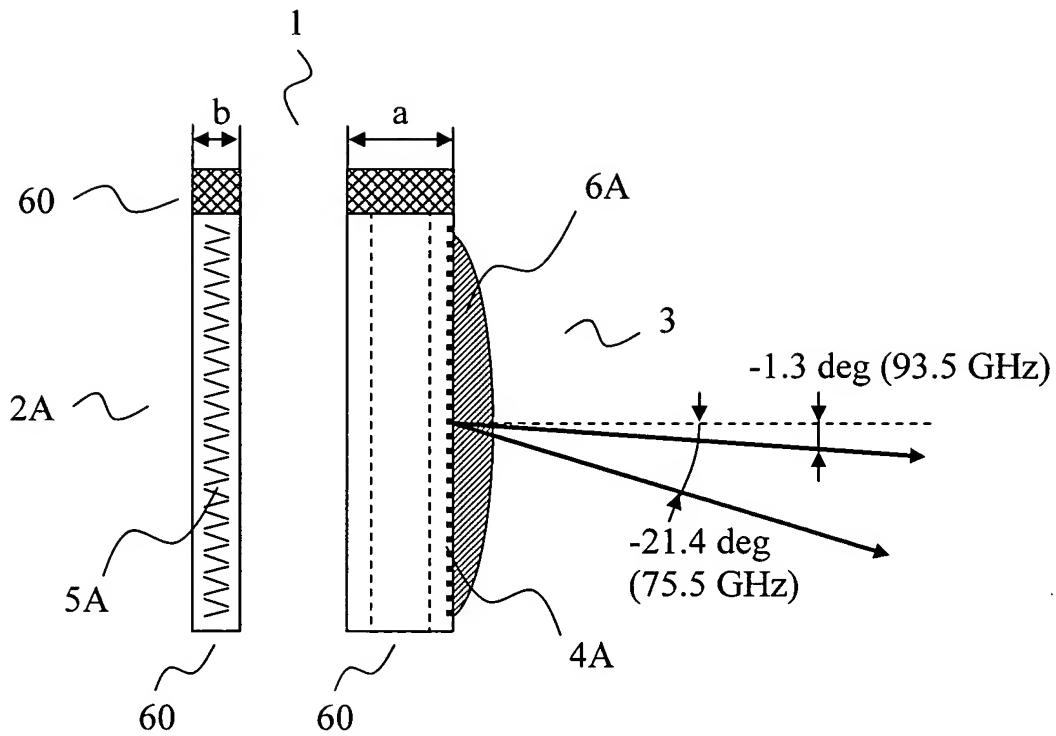


FIG. 8A FIG. 8B

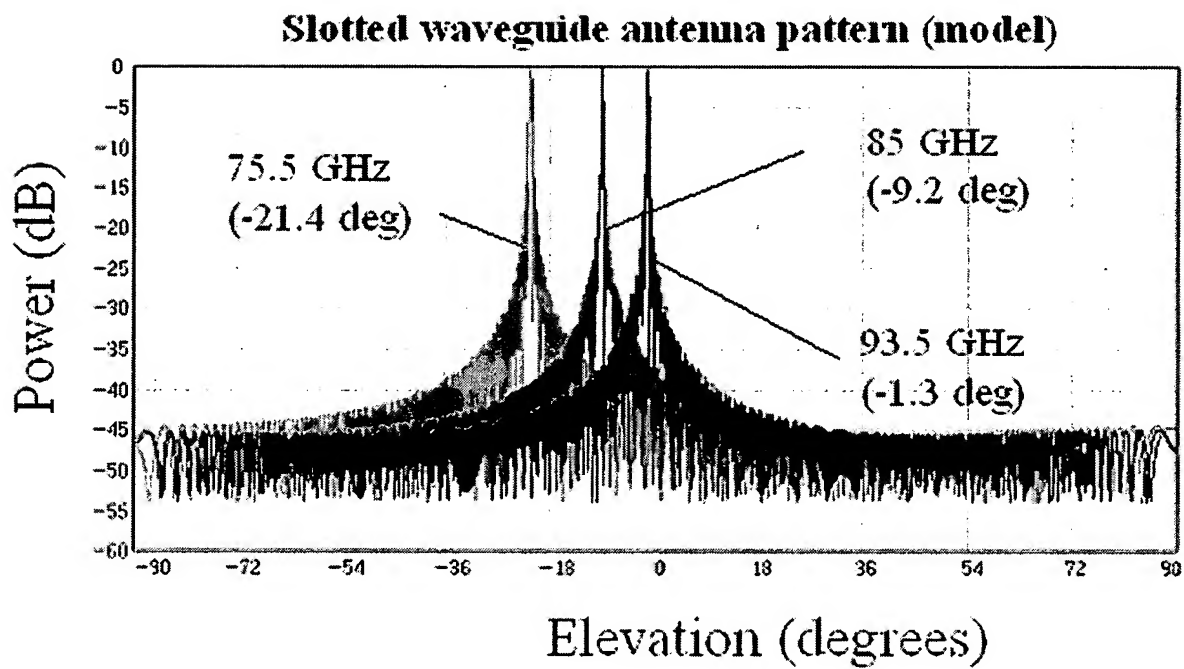


FIG. 9



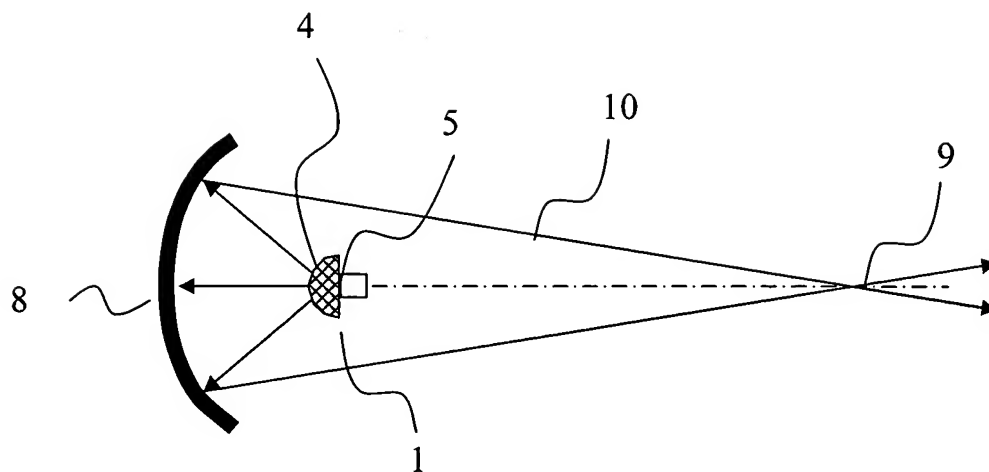


FIG. 10A

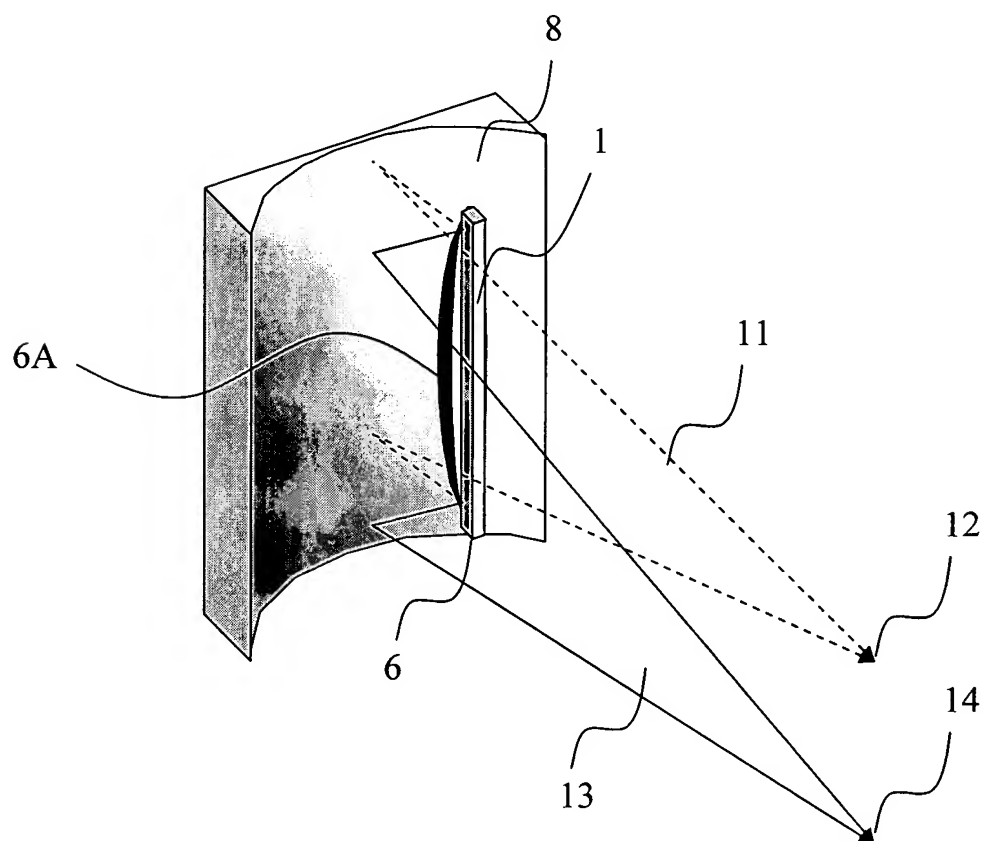


FIG. 10B

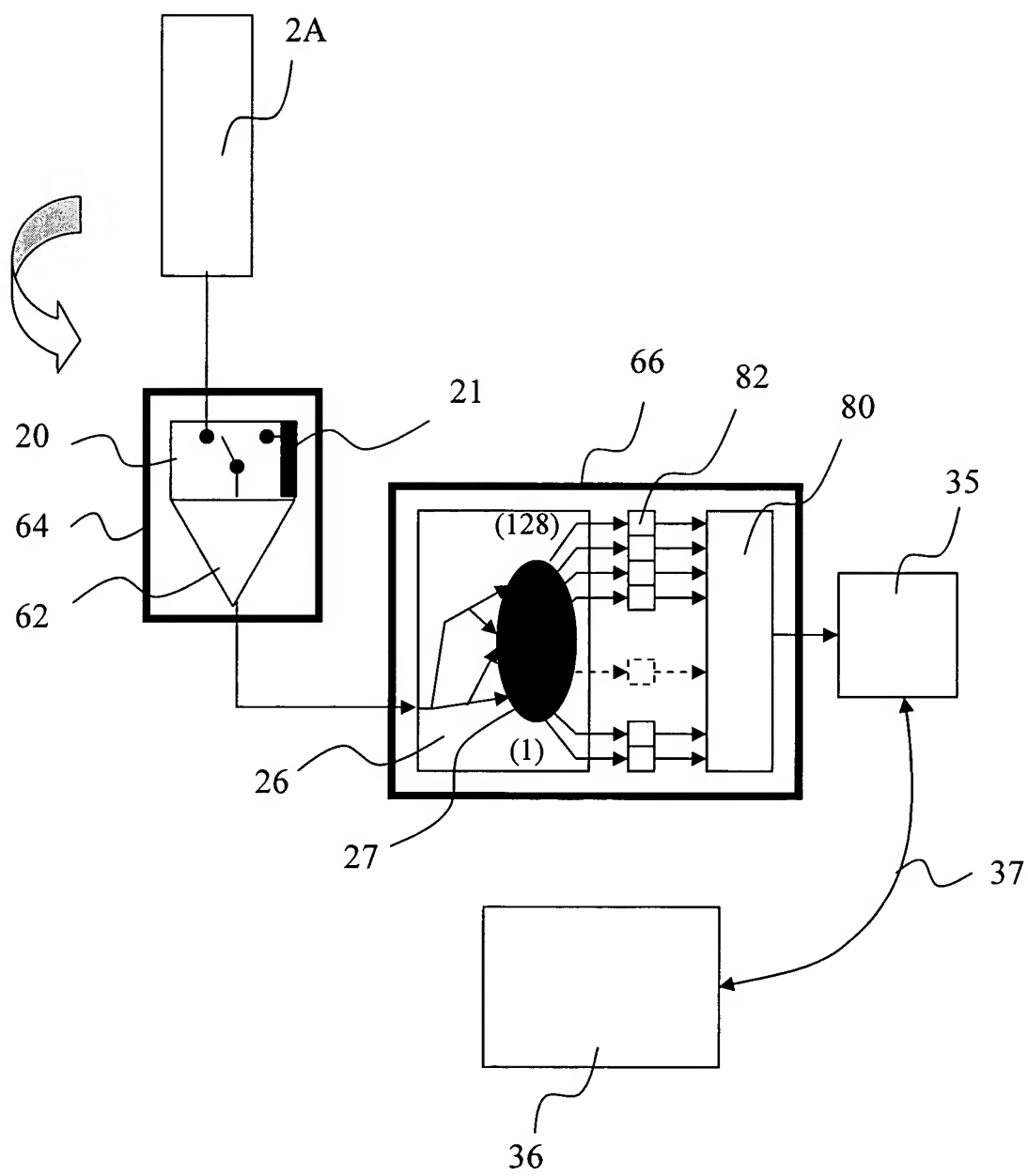


FIG. 11

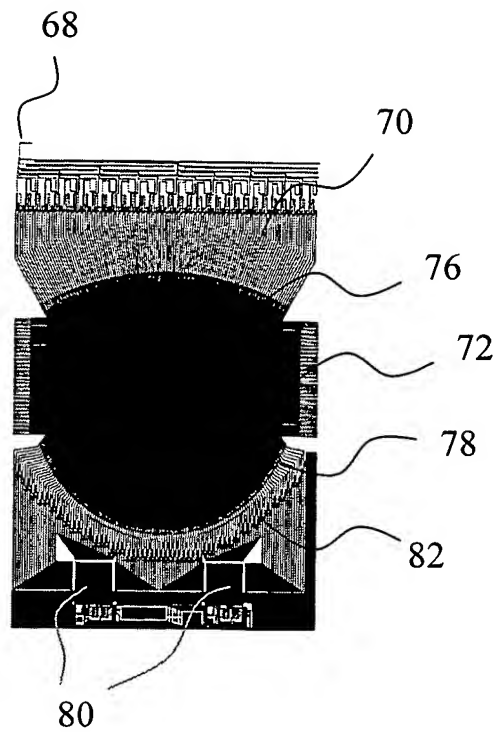


FIG. 12

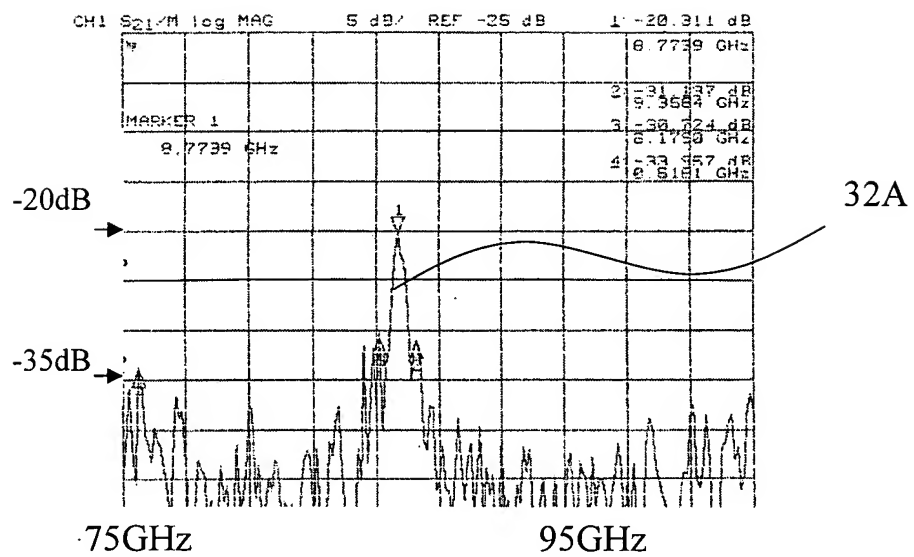


FIG. 13

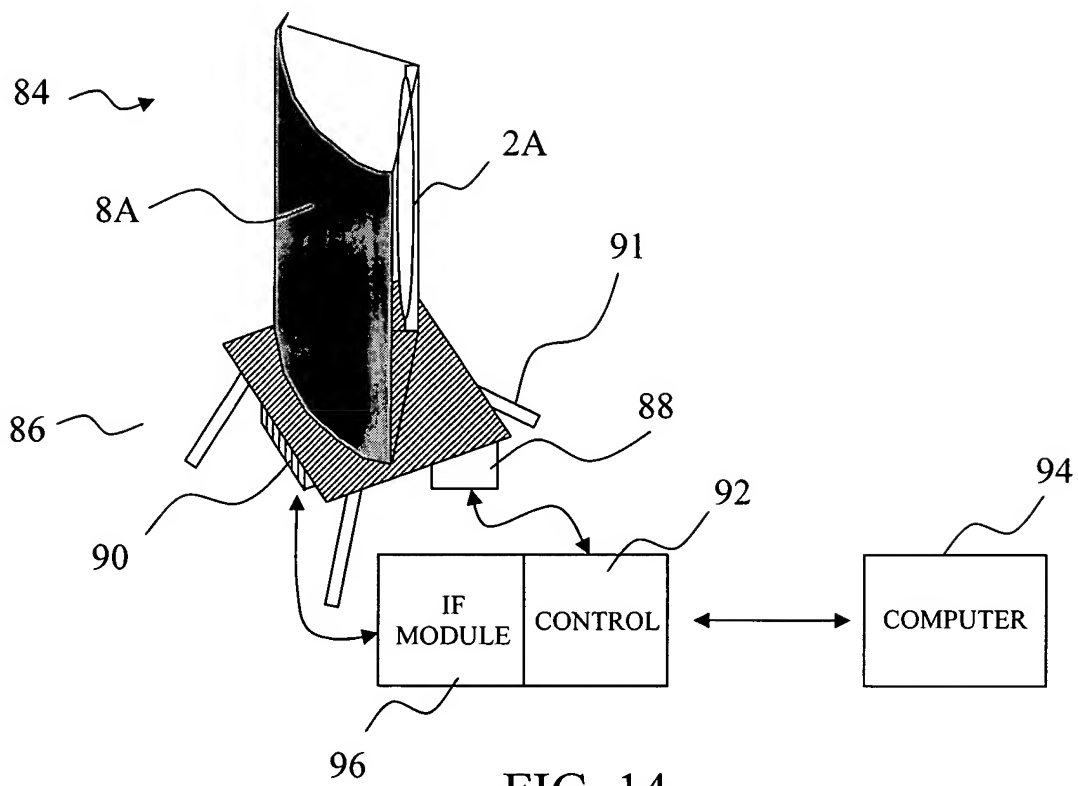


FIG. 14



FIG. 14B

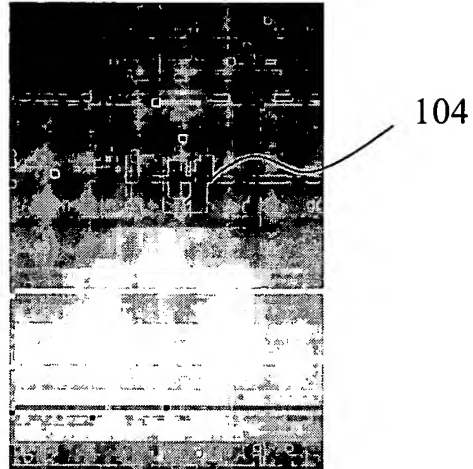


FIG. 15A

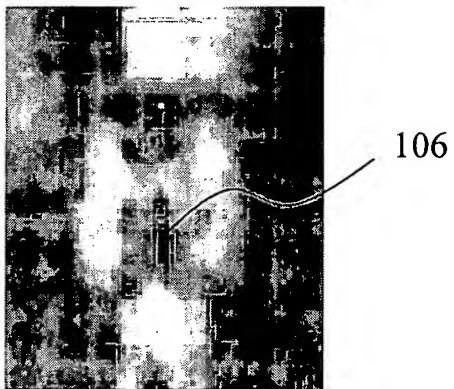


FIG. 15B

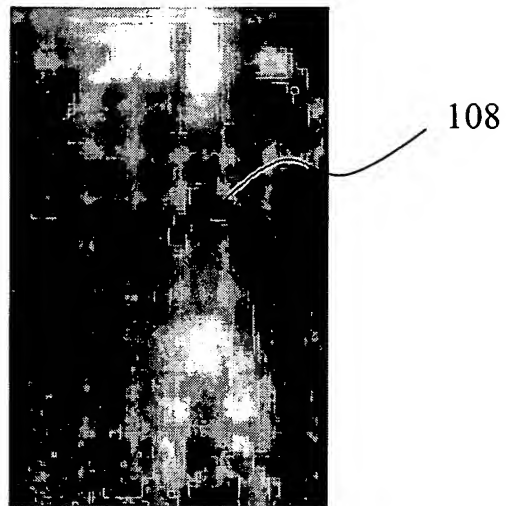


FIG. 15C

BEST AVAILABLE COPY